

IN THE CLAIMS:

1. (Currently Amended): A method, in a data processing system, for generating bids for an auction, the method comprising:

~~identifying a final equilibrium position for a set of bidding agents~~ sorting a plurality of bids for a set of bidding agents by decreasing bid amount to form a sorted set of bids, wherein bids for the set of bidding agents are sorted using upper limits for the bids for the set of bidding agents;

identifying a first bid from the plurality of bids for which an unallocatable portion of a requested quantity is present;

selecting a number of bids from the plurality of bids, wherein the number of bids is higher in the sorted set of bids than the first bid and wherein each bid in the number of bids has an allocation requirement less than the unallocatable portion of the first bid;

setting a price for the number of bids to form a final equilibrium price; and

submitting a bid, in the data processing system, for each of the bidding agents based on the final equilibrium price.

2. (Canceled)

3. (Canceled)

4. (Currently Amended): The method of claim [[3]] 1, wherein the sorting step, identifying step, selecting step, and setting step are repeated for unallocated items, remaining bids, and remaining unpriced order bids.

5. (Currently Amended): A method, in a data processing system, for generating bids for bidding agents in an auction, the method comprising:

sorting a plurality of bids by decreasing bid amount to form a sorted set of bids, wherein each bid includes a quantity and wherein the plurality of bids includes order bids;

identifying a first bid requesting a quantity ~~[[in]]~~ for which an unallocatable portion is present;

selecting a number of order bids from the plurality of bids, wherein the number of order bids ~~[[are]]~~ is higher in the sorted set of bids than the first bid and have an allocation requirement less than the unallocatable portion of the ~~[[of the]]~~ first bid; and

setting a price, in the data processing system, for the number of order bids to form a final equilibrium price.

6. (Original): The method of claim 5, wherein the number of order bids is a single order bid.

7. (Original): The method of claim 5, wherein each bid in the number of order bids is selected from the plurality of bids based on the allocation requirement, upper limit, and a time when each order bid in the number of order bids was received.

8. (Original): The method of claim 5, wherein each order bid in the number of order bids is selected from the plurality of bids based on the allocation requirement and an upper limit.

9. (Original): The method of claim 5, wherein each bid in the number of order bids is selected based on the allocation requirement and the number of order bids maximize revenue.

10. (Original): The method of claim 5, further comprising:

repeating the selecting and setting steps for any remaining portion of the unallocatable portion and any remaining order bids in the plurality of bids.

11. (Original): The method of claim 5, wherein the price of the number of order bids is less than a price for the first bid.

12. (Original): The method of claim 5, wherein the number of order bids includes a bid accepting a partial allocation of a quantity for the bid.

13. (Currently Amended): A data processing system comprising:

- a bus system;
- a communications unit connected to the bus system;
- a memory connected to the bus system, wherein the memory includes a set of instructions; and
- a processing unit connected to the bus system, wherein the processing unit executes the set of instructions to receive a plurality of bids through the communications unit, sort the plurality of bids by decreasing bid amount to form a sorted set of bids in which each bid includes a quantity and the plurality of bids includes order bids, identify a first bid within the sorted set of bids having a quantity in which an unallocatable portion is present, select a number of order bids from the plurality of bids in which number of order bids are higher in the sorted set of bids than the first bid and have an allocation requirement less than the unallocatable portion of the [[of the]] first bid, set a price for the number of order bids.

14. (Original): The data processing system of claim 13, wherein the bus system is a single bus.

15. (Original): The data processing system of claim 13, wherein the bus system includes a primary bus and a secondary bus.

16. (Original): The data processing system of claim 13, wherein the processing unit includes a plurality of processors.

17. (Original): The data processing system of claim 13, wherein the communications unit is one of a modem and Ethernet adapter.

18. (Currently Amended): A data processing system for generating bids for an auction, the data processing system comprising:

~~identifying means for identifying a final equilibrium position for a set of bidding agents~~
sorting means for sorting a plurality of bids for a set of bidding agents by decreasing bid amount to form a sorted set of bids, wherein bids for the set of bidding agents are sorted using upper limits for the bids for the set of bidding agents;

identifying means for identifying a first bid from the plurality of bids for which an unallocatable portion of a requested quantity is present;

selecting means for selecting a number of bids from the plurality of bids, wherein the number of bids is higher in the sorted set of bids than the first bid and wherein each bid in the number of bids has an allocation requirement less than the unallocatable portion of the first bid;

setting means for setting a price for the number of bids to form a final equilibrium price; and

submitting means for submitting a bid for each of the bidding agents based on the final equilibrium.

19. (Canceled)

20. (Canceled)

21. (Currently Amended): The data processing system of claim [[20]] 18, wherein the sorting means, identifying means, selecting means, and setting means are repeated for unallocated items, remaining bids, and remaining unpriced order bids.

22. (Currently Amended): A data processing system for generating bids for bidding agents in an auction, the data processing system comprising:

sorting means for sorting a plurality of bids by decreasing bid amount to form a sorted set of bids, wherein each bid includes a quantity and wherein the plurality of bids includes order bids;

identifying means for identifying a first bid requesting a quantity in which an unallocatable portion is present;

selecting means for selecting a number of order bids from the plurality of bids, wherein the number of order bids are higher in the sorted set of bids than the first bid and have an allocation requirement less than the unallocatable portion of the [[of the]] first bid; and

setting means for setting a price for the number of order bids.

23. (Original): The data processing system of claim 22, wherein the number of order bids is a single order bid.

24. (Original): The data processing system of claim 22, wherein each bid in the number of order bids is selected from the plurality of bids based on the allocation requirement, upper limit, and a time when each order bid in the number of order bids was received.

25. (Original): The data processing system of claim 22, wherein each order bid in the number of order bids is selected from the plurality of bids based on the allocation requirement and an upper limit.

26. (Original): The data processing system of claim 22, wherein each bid in the number of order bids is selected based on the allocation requirement and the number of order bids maximize revenue.

27. (Original): The data processing system of claim 22 further comprising:

repeating means for repeating initiation of the selecting means and setting means for any remaining portion of the unallocatable portion and any remaining order bids in the plurality of bids.

28. (Original): The data processing system of claim 22, wherein the price of the number of order bids is less than a price for the first bid.

29. (Original): The data processing system of claim 22, wherein the number of order bids includes a bid accepting a partial allocation of a quantity for the bid.

30. (Currently Amended): A computer program product in a computer readable medium for generating bids for an auction, the computer program product comprising:

first instructions for identifying a final equilibrium position for a set of bidding agents sorting a plurality of bids for a set of bidding agents by decreasing bid amount to form a sorted set of bids, wherein bids for the set of bidding agents are sorted using upper limits for the bids for the set of bidding agents;

second instructions for identifying a first bid from the plurality of bids for which an unallocatable portion of a requested quantity is present;

third instructions for selecting a number of bids from the plurality of bids, wherein the number of bids is higher in the sorted set of bids than the first bid and wherein each bid in the number of bids has an allocation requirement less than the unallocatable portion of the first bid;

fourth instructions for setting a price for the number of bids to form a final equilibrium price; and

second fifth instructions for submitting a bid for each of the bidding agents based on the final equilibrium.

31. (Currently Amended): A computer program product in a computer readable medium for generating bids for bidding agents in an auction, the computer program product comprising:

first instructions for sorting a plurality of bids by decreasing bid amount to form a sorted set of bids, wherein each bid includes a quantity and wherein the plurality of bids includes order bids;

second instructions for identifying a first bid requesting a quantity [[in]] for which an unallocatable portion is present;

third instructions for selecting a number of order bids from the plurality of bids, wherein the number of order bids are higher in the sorted set of bids than the first bid and

have an allocation requirement less than the unallocatable portion of the [[of the]] first bid; and

fourth instructions for setting a price for the number of order bids.